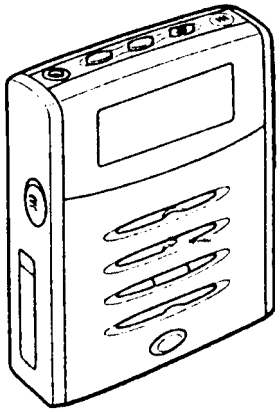
aiwa SERVICE

MM-VX200 Y(S) YJ(S) YU(S)



SERVICE MANUAL

PORTABLE MP3 PLAYER

aiwa

S/M Code No. 09-001-338-5N2

DATA

SPECIFICATIONS

Storage media	Built-in 32MB Flash Memory SmartMedia-ID slot for a removable 16MB, 32MB or 64MB SmartMedia-ID
Maximum output level	5 mW + 5 mW (32 ohms)
Frequency range	20 Hz–20 kHz
Load impedance	16–32 ohms
Distortion rate	0.35% or less
S/N ratio	85 dB
Power supply	DC 1.5 V using a size AA (LR6) alkaline battery AC house current using the AC adaptor Aiwa AC-D302 (not supplied)
Battery life	Approx.15 hours using an LR6 alkaline battery
Display	Graphic type LCD (128 x 32 DOT)
PC interface	USB cable
Built-in microphone	Electret condenser microphone (monaural)
Maximum outside dimensions	61.3 mm (W) x 85 mm (H) x 19 mm (D) (not including projecting parts and controls)
Weight	Approx. 72 g excluding battery

- Design and specifications are subject to change without notice.
- Microsoft and Windows are registered trademarks of Microsoft Corporation.
- Pentium and MMX are registered trademarks of Intel Corporation.
- SmartMedia is a registered trademark of TOSHIBA Corporation.
- Portions of this product are protected under copyright law and provided by Airs/Solana/4C.
- RealPlayer and RealJukebox are trademarks of RealNetworks Inc.

ACCESSORIES LIST

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S2-001-915-010		INSTRUCTION BOOK Y(5L)K200<Y>
1	S2-001-912-010		INSTRUCTION BOOK YJ(EC)K 200<YJ>
1	S2-001-911-010		INSTRUCTION BOOK YU(3)K200<YU>
2	S4-120-00S-150		REMOTE ASSY EAPHONE
3	S4-110-00S-023		EARPHONE HP-M054
4	S1-670-20S-024		USB CABLE

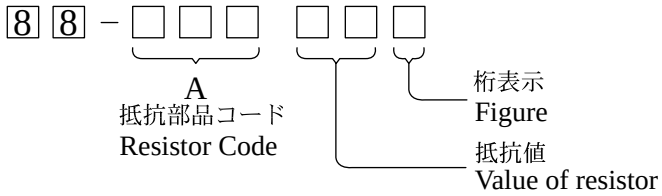
ELECTRICAL MAIN PARTS LIST -1/2

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	S2-153-410-180		IC,BA3410AF-E2
	S2-157-47S-002		IC,HD74LV74
	S2-157-41S-003		IC,HD74LV157
	S2-163-50S-002		IC,MAS3507D
	S2-166-65S-001		IC,MSM66Q573
	S2-151-67S-011		IC,MAX1675
	87-A21-589-080		IC,R1120N251A-TL
	S2-166-08S-001		IC,ML60851C
	S2-151-28S-001		IC,KM29U128000T
	S2-171-12S-002		IC,R1120N331B-TL
	S2-157-43S-001		IC,HD74LV32
	S2-157-40S-003		IC,HD74LVC245
	S2-161-34S-001		IC,UDA1345TS
	S2-154-53S-058		IC,LA4534M
TRANSISTOR			
	S2-461-500-060		C-TR,KTA1504S-Y
	S2-482-30S-001		C-FET,SI2305DS
	S2-453-260-180		C-TR,KTC3265-Y
	S2-451-300-060		C-TR,KTD1304
	87-026-334-080		C-TR,DTA143TU
DIODE			
	S2-550-000-050		D-SCHOTTKY/CHIP MA729
	87-017-779-080		C-DIODE,1SS355
MAIN C.B			
C111	S8-552-269-210		CAP,TA 22UF-6.3V
C112	S8-552-249-810		CAP,TA 0.22UF-35V
C113	S8-553-359-210		CAP,TA 3.3UF-6.3V
C114	S8-552-269-210		CAP,TA 22UF-6.3V
C115	S8-552-269-210		CAP,TA 22UF-6.3V
C116	S8-552-269-210		CAP,TA 22UF-6.3V
C117	S8-552-269-210		CAP,TA 22UF-6.3V
C206	S8-564-769-110		CAP,TA 47UF-6.3V
C207	S8-564-769-110		CAP,TA 47UF-6.3V
C306	S8-552-259-310		CAP,TA 2.2UF-10V
C307	S8-552-259-310		CAP,TA 2.2UF-10V
C308	S8-552-259-310		CAP,TA 2.2UF-10V
C409	S8-552-269-210		CAP,TA 22UF-6.3V
C412	S8-564-769-110		CAP,TA 47UF-6.3V
C414	S8-564-769-110		CAP,TA 47UF-6.3V
C419	S8-552-269-210		CAP,TA 22UF-6.3V
C420	S8-564-769-110		CAP,TA 47UF-6.3V
C423	S8-564-769-110		CAP,TA 47UF-6.3V
C601	S8-552-269-210		CAP,TA 22UF-6.3V
C603	S8-552-269-210		CAP,TA 22UF-6.3V
C606	S8-552-269-210		CAP,TA 22UF-6.3V
C609	S8-552-269-210		CAP,TA 22UF-6.3V
C612	S8-552-269-210		CAP,TA 22UF-6.3V
C619	S8-552-269-210		CAP,TA 22UF-6.3V
C622	S8-612-211-030		CAP,E 220UF-5,4V
C623	S8-612-211-030		CAP,E 220UF-5,4V
C628	S8-552-269-210		CAP,TA 22UF-6.3V
C631	S8-552-269-210		CAP,TA 22UF-6.3V
C705	S8-564-769-110		CAP,TA 47UF-6.3V
CN401	S1-670-20S-008		BOARD CONN 30P
FB201	S4-453-R30-230		C-COIL,3.3UH
FB401	S4-461-020-100		FERRITE BEAD-CHIP
FB402	S4-461-020-100		FERRITE BEAD-CHIP
FB601	S4-461-020-100		FERRITE BEAD-CHIP
FB602	S4-461-020-100		FERRITE BEAD-CHIP
FB603	S4-461-020-100		FERRITE BEAD-CHIP
FB604	S4-461-020-100		FERRITE BEAD-CHIP
FB605	S4-461-020-100		FERRITE BEAD-CHIP
J201	S5-110-000-510		JACK,HP 3.5-ST BLK
J401	S5-130-000-020		JACK,DC 2.35 BLK
L202	S4-451-000-050		C-COIL,10UH
L203	S4-451-000-050		C-COIL,10UH
L204	S4-451-000-050		C-COIL,10UH
L401	S4-452-200-040		C-COIL,22UH
L402	S4-453-R30-230		C-COIL,3.3UH
L403	S4-453-R30-230		C-COIL,3.3UH
L406	S4-451-000-050		C-COIL,10UH
L605	S4-453-R30-230		C-COIL,3.3UH
L607	S4-451-000-050		C-COIL,10UH
L608	S4-451-000-050		C-COIL,10UH
L609	S4-453-R30-230		C-COIL,3.3UH
L701	S4-451-000-050		C-COIL,10UH
LCD301	S2-730-00S-037		DISPLAY LCD(MMVX100)
MC501	S9-320-000-110		MIC,CON/UNIT
S0	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S1	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S2	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S3	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S4	S6-750-300-030		SW,TACT CHIP SKQTLBE010(MMVX10
S5	S6-750-300-030		SW,TACT CHIP SKQTLBE010(MMVX10
S6	S6-750-300-030		SW,TACT CHIP SKQTLBE010(MMVX10
S7	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S8	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S9	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S10	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S11	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S12	S6-750-300-010		SW,TACT CHIP SKQDABE010(MMVX10
S13	S6-250-120-130		SW,SLIDE CHIP 1C2P(MMVX100)
X401	S3-510-000-190		X'TAL,SEAM14.725M 20PPM(MMVX10
X402	S3-510-000-050		X'TAL,32.768KHZ 20PPM(MMVX100)
X701	S3-510-00S-025		X'TAL(SMD)CSTCW4800MX-4100
SUB C.B			
C505	S8-552-269-210		CAP,TA 22UF-6.3V
C506	S8-552-269-210		CAP,TA 22UF-6.3V
C508	S8-552-269-210		CAP,TA 22UF-6.3V
CN402	S1-670-20S-007		BOARD CONN 30P
CN501	S1-670-20S-010		SMART CONN CN015R-3123
CN503	S1-670-20S-023		USB CONN 4P
FB501	S4-461-020-100		FERRITE BEAD-CHIP
FB502	S4-461-020-100		FERRITE BEAD-CHIP
FB503	S4-461-020-100		FERRITE BEAD-CHIP
FB504	S4-461-020-100		FERRITE BEAD-CHIP
FB505	S4-461-020-100		FERRITE BEAD-CHIP

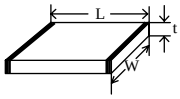
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

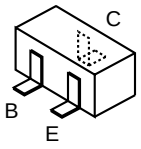
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



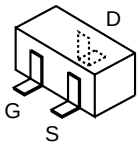
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

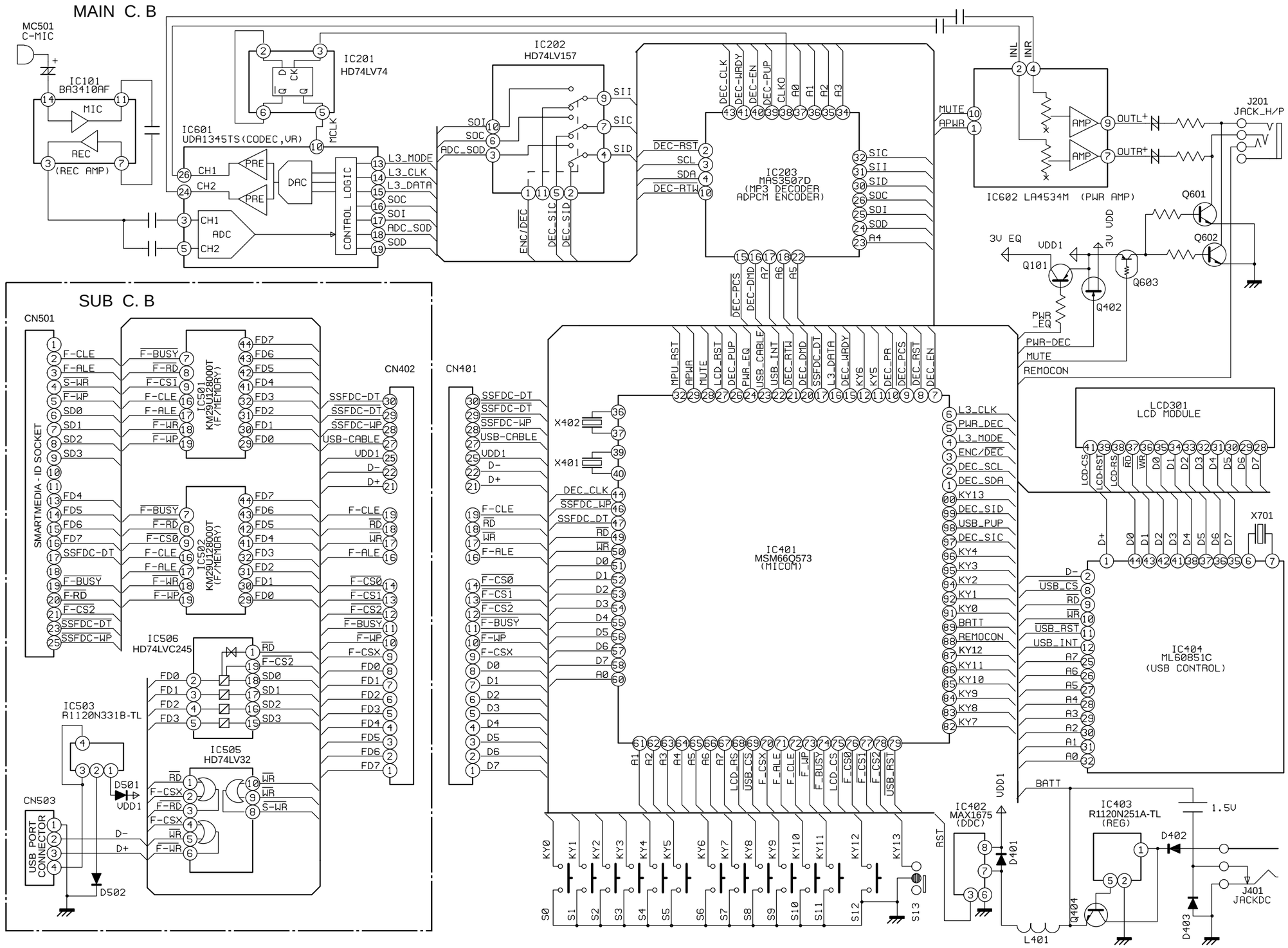
TRANSISTOR ILLUSTRATION



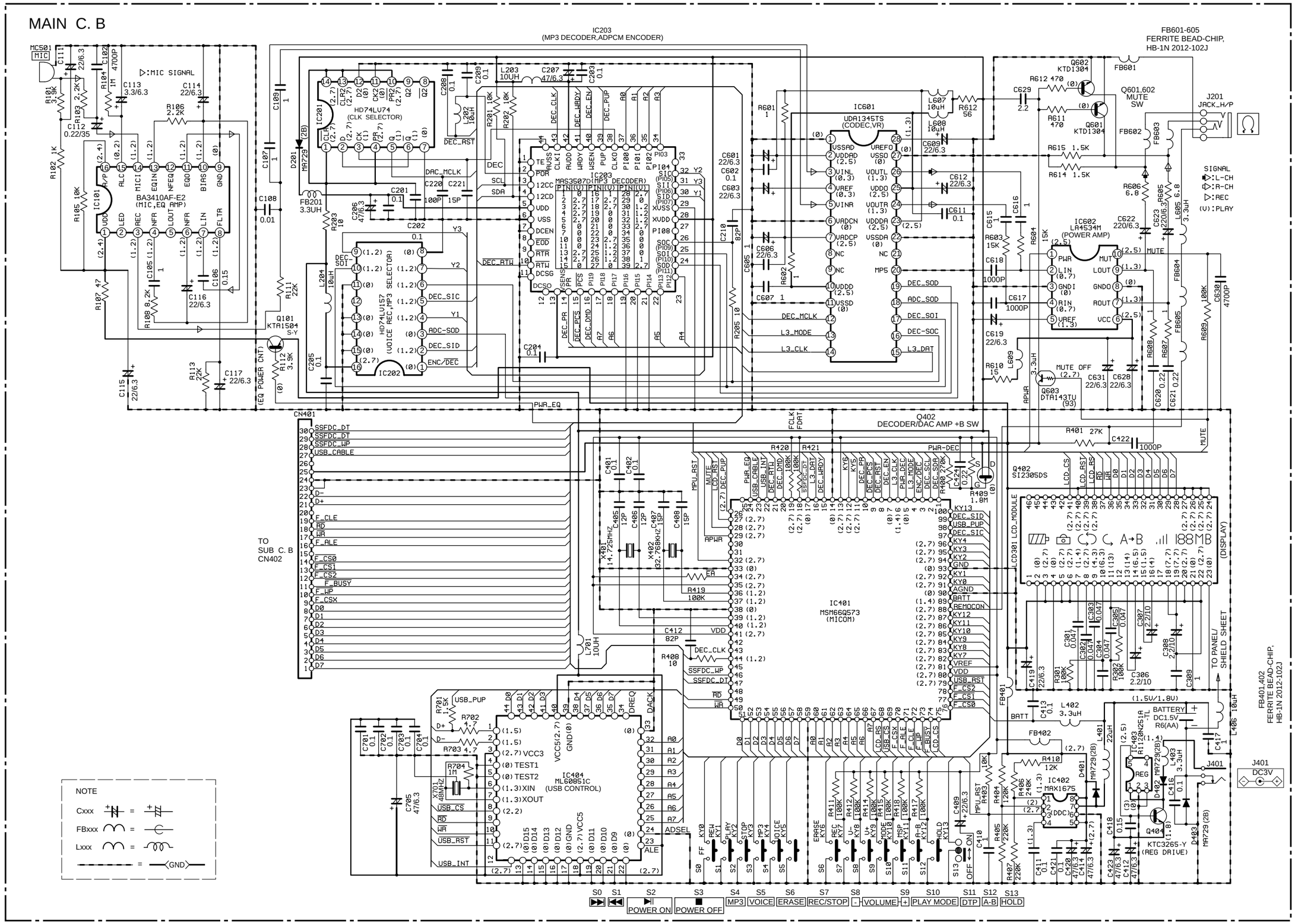
DTA143TU
KTA1504S
KTC3265
KTD1304



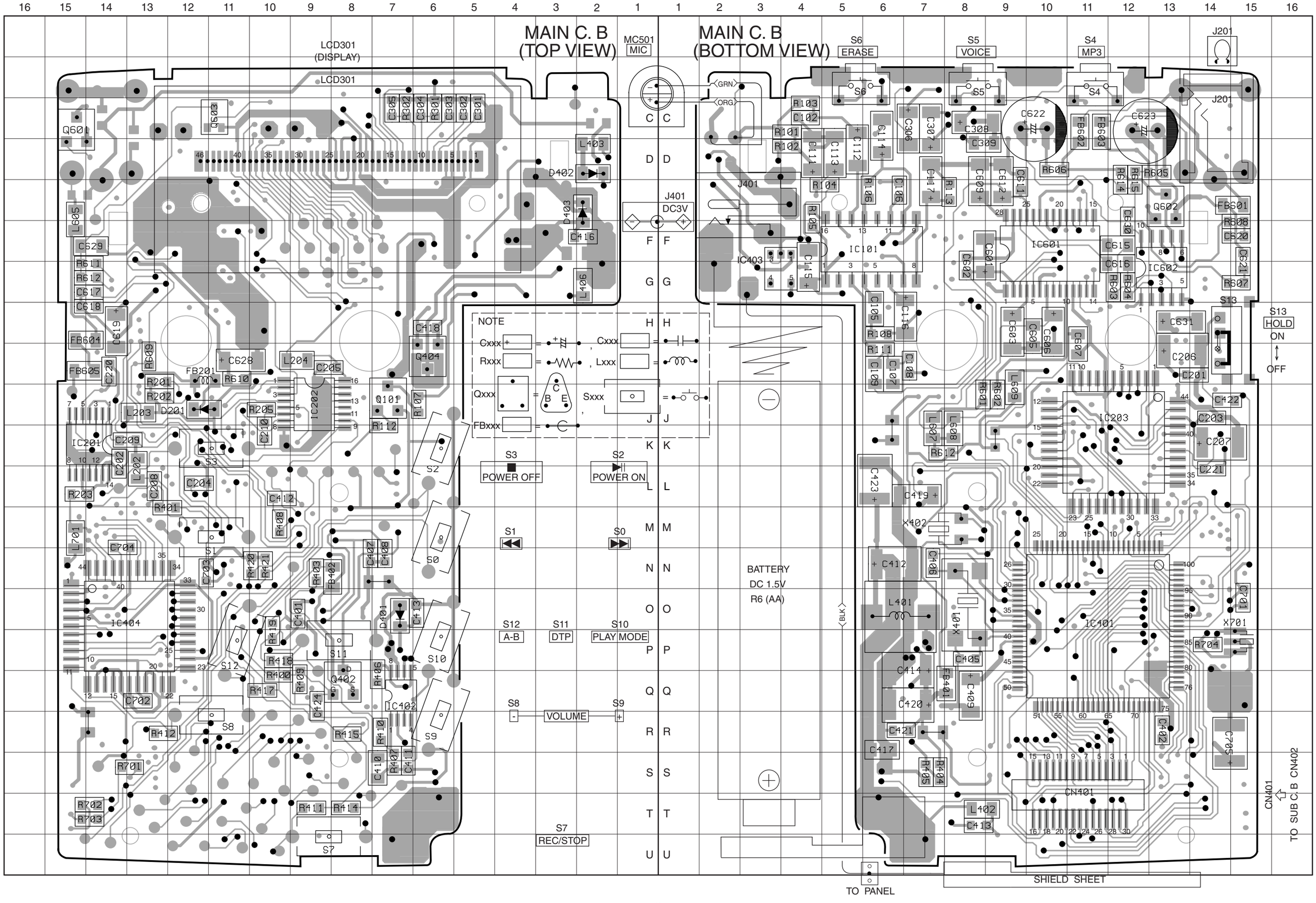
SI2305DS

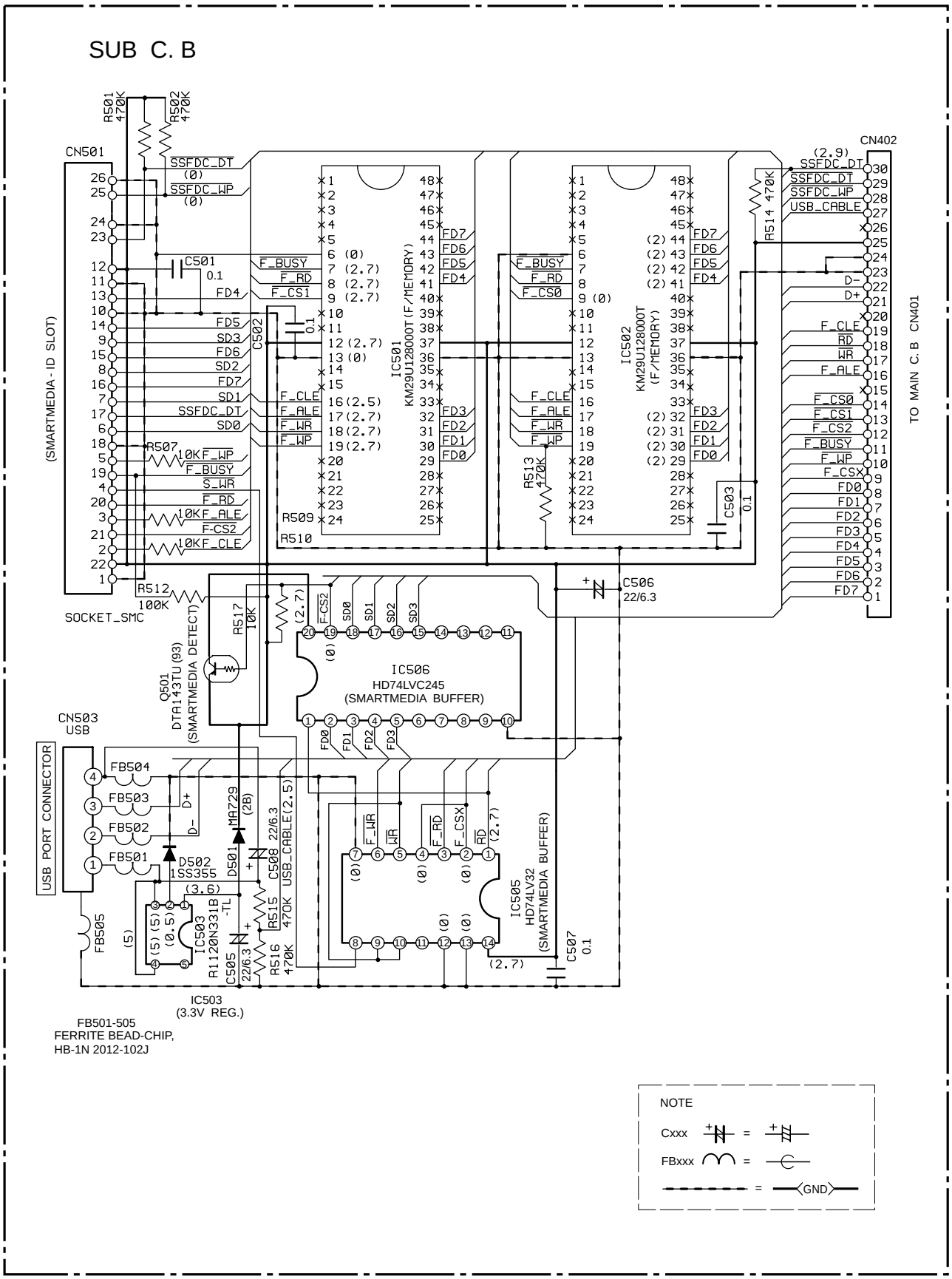

MAIN C. B
SUB C. B
MC501
C-MIC
IC101
BA3410AF
MIC
REC
(REC AMP)
IC201
HD74LV74
IC601
UDA1345TS(CODEC,VR)
CH1
CH2
PRE
DAC
CONTROL LOGIC
ADC
MCLK
L3_MODE
L3_CLK
L3_DATA
SOC
SOI
ADC_SOD
SOD
IC202
HD74LV157
SII
SIC
SID
ENC/DEC
DEC_SIC
DEC_SID
IC203
MAS3507D
(MP3 DECODER
ADPCM ENCODER)
DEC_CLK
DEC_WRDY
DEC_EN
DEC_PUP
CLKO
DEC_RST
SCL
SDA
DEC_RTW
DEC_PCS
DEC_DMD
INL
INR
MUTE
APWR
AMP
OUTL+
OUTR+
J201
JACK_H/P
IC602 LA4534M (PWR AMP)
Q601
Q602
Q603
Q402
Q101
3V EQ
VDD1
3V VDD
PWR_EQ
PWR-DEC
MUTE
REMOCON
CN501
SMARTMEDIA - ID SOCKET
F-CLE
F-ALE
S-WR
F-WP
SD0
SD1
SD2
SD3
F-BUSY
F-RD
F-CS1
F-CS0
F-WR
SSFDC-DT
SSFDC-WP
FD0
FD1
FD2
FD3
FD4
FD5
FD6
FD7
IC502
KM29U128000T
(F/MEMORY)
CN402
SSFDC-DT
SSFDC-WP
USB-CABLE
VDD1
D-
D+
F-CLE
RD
WR
F-ALE
F-CS0
F-CS1
F-CS2
F-BUSY
F-WP
F-CSX
IC506
HD74LVC245
IC503
R1120N331B-TL
IC505
HD74LV32
CN503
USB PORT
CONNECTOR
D501
D502
CN401
MPU_RST
APWR
MUTE
LCD_RST
DEC_PUP
PWR_EQ
USB_CABLE
USB_INT
DEC_RTW
DEC_DMD
SSFDC_DT
L3_DATA
DEC_WRDY
KY6
KY5
DEC_PR
DEC_PCS
DEC_RST
DEC_EN
X402
X401
IC401
MSM66Q573
(MICOM)
KY0
KY1
KY2
KY3
KY4
KY5
KY6
KY7
KY8
KY9
KY10
KY11
KY12
KY13
S0
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
LCD_RS
USB_CS
F_CSX
F_ALE
F_CLE
F_WP
F_BUSY
LCD_CS
F_CS0
F_CS1
F_CS2
USB_RST
RST
L3_CLK
PWR_DEC
L3_MODE
ENC/DEC
DEC_SCL
DEC_SDA
KY13
DEC_SID
USB_PUP
DEC_SIC
KY4
KY3
KY2
KY1
KY0
BATT
REMOCON
KY12
KY11
KY10
KY9
KY8
KY7
LCD301
LCD MODULE
LCD-CS
LCD-RST
LCD-RS
RD
WR
D0
D1
D2
D3
D4
D5
D6
D7
X701
IC404
ML60851C
(USB CONTROL)
USB_CS
USB_RST
USB_INT
A7
A6
A5
A4
A3
A2
A1
A0
IC402
MAX1675
(DDC)
D401
L401
IC403
R1120N251A-TL
(REG)
1.5V
D402
D403
Q404
J401
JACKDC

SCHEMATIC DIAGRAM - 1 (MAIN SECTION)



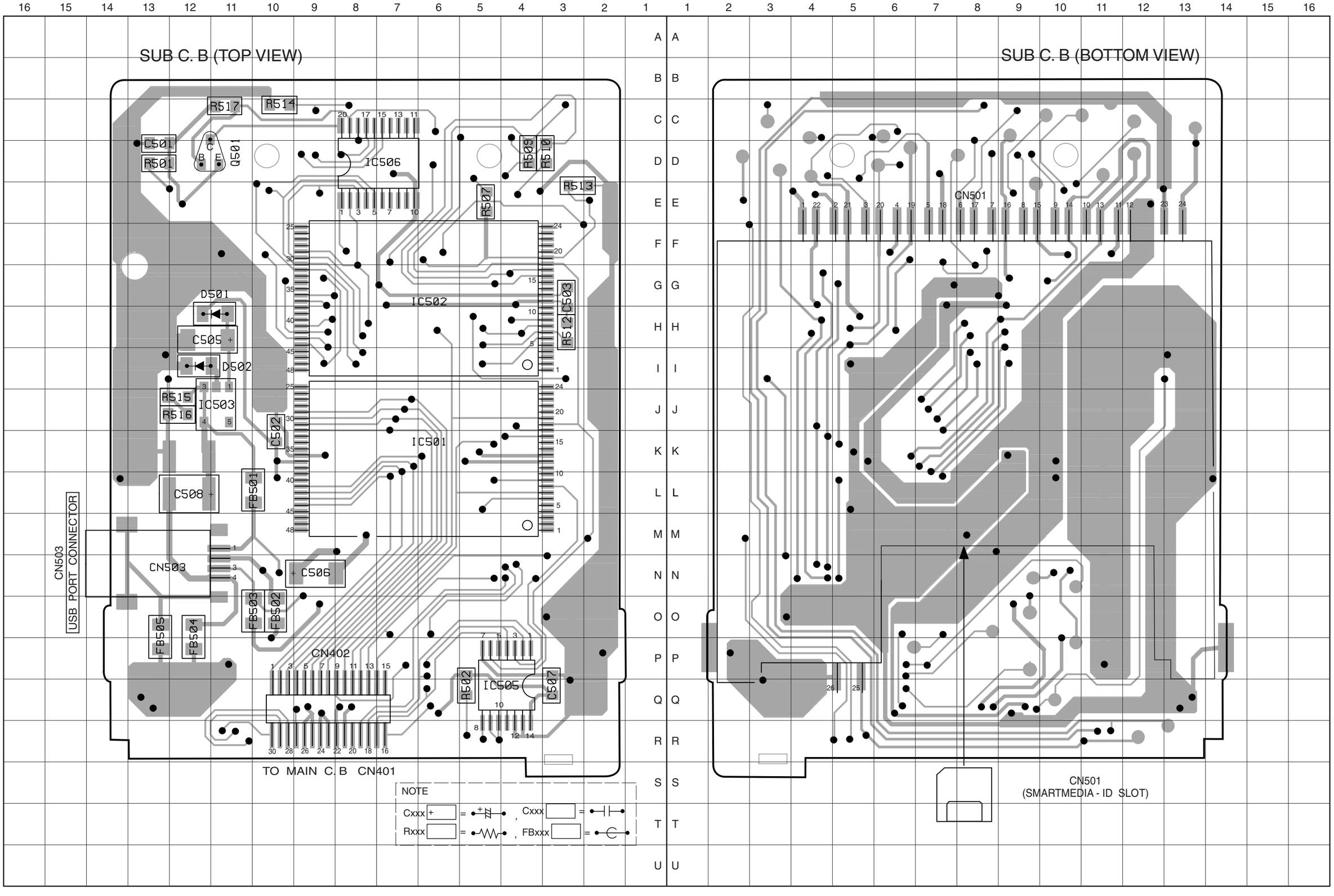
WIRING - 1 (MAIN C.B)




SUB C. B
CN501
(SMARTMEDIA - ID SLOT)
SOCKET_SMC
CN402
TO MAIN C.B CN401
IC501
KM29U128000T(F/MEMORY)
IC502
KM29U128000T
(F/MEMORY)
IC506
HD74LVC245
(SMARTMEDIA BUFFER)
IC505
HD74LV32
(SMARTMEDIA BUFFER)
IC503
R1120N331B -TL
(3.3V REG.)
Q501
DTA143TU(93)
(SMARTMEDIA DETECT)
CN503
USB
USB PORT CONNECTOR
USB_CABLE(2.5)
FB501-505
FERRITE BEAD-CHIP,
HB-1N 2012-102J
NOTE
Cxxx
FBxxx
GND

SUB C. B (TOP VIEW)

SUB C. B (BOTTOM VIEW)



Pin No.	Pin Name	I/O	Description
1	DEC SDA	I/O	MASC3507D-F10 I2C SDA
2	DEC SCL	I/O	MASC3507D-F10 I2C SCL
3	ENC/$\overline{\text{DEC}}$	O	L = decode (MP3/ADPCM), h = encode (ADPCM)
4	L3 MODE	O	CODEC (UDA1345TS) control mode
5	PWR DEC	O	MAS3507D (UDA 1345TS) control clock
6	L3 CLK	O	CODEC (UDA1345TS) control clock
7	DEC EN	O	L = enables MAS3507D operation
8	$\overline{\text{DEC RST}}$	O	Reset MAS3507D
9	$\overline{\text{DEC PCS}}$	O	L = enables MAS3507D PIO pins
10	DEC PR	O	H = enables MAS3507D PIO pins
11	KY5	I	Key input (VOICE)
12	KY6	I	Key input (ERASE)
13	VDD	–	+2.9 V
14	GND	–	Ground
15	DEC WRDY	I	MAS3507D operation ready
16	L3 DAT	O	CODEC (UDA1345TS) control data
17	$\overline{\text{SSFDC DT}}$	I	SMC insert/eject input port
18	FDAT	I	Serial clock input (Flash type micom programming in the serial mode)
19	FCLK	I/O	Serial data I/O (Flash type micom programming in the serial mode)
20	DEC DMD	I	MAS3507D demand pin (both edge)
21	$\overline{\text{DEC RTW}}$	I	MAS3507D demand pin (falling edge)
22	USB INT	I	Falling edge
23	USB CABLE	I	Both edge
24	PWR EQ	O	ALC circle power on/off control output port
25	NC	–	Not connected
26	DEC PUP	I	MAS3507D status of voltage monitoring
27	LCD RST	O	Reset output port (Graphic LCD controller KS0713)
28	MUTE	O	Audio mute cotrol
29	APWR	O	Power AMP (4534) power on/off control
30	NC	–	Not connected
31	NC	–	Not connected
32	MPU RST	I	Micom reset input
33	NMI	I	Non-maskable interrupt
34	$\overline{\text{EA}}$	I	External program memory access inpu/High volatge input to set serial mode (Flash type micom programming in the serial mode)
35	VDD	–	+2.9 V
36	XT0	I	32.768 kHz crystal
37	XT1	O	32.768 kHz crystal
38	GND	–	Ground
39	OSC0	I	14.725 MHz crystal
40	OSC1	O	14.725 MHz crystal

Pin No.	Pin Name	I/O	Description
41	VDD	–	+2.9 V
42	NC	–	Not coneected
43	NC	–	Not connected
44	DEC CLK	O	MAS3507D-P10 system clock output (14.725 MHz)
45	DEC SUBCLK	O	Unused
46	$\overline{\text{SSFDC WP}}$	I	SMC write protectiondetect input port
47	SSFDC DT	I	SMC insert/eject detect input port
48	NC	–	Unused
49	$\overline{\text{RD}}$	O	External device access read strobe output port
50	$\overline{\text{WR}}$	O	External device access write strobe output port
51	D0	I/O	External device access data I/O port
52	D1	I/O	External device access data I/O port
53	D2	I/O	External device access data I/O port
54	D3	I/O	External device access data I/O port
55	D4	I/O	External device access data I/O port
56	D5	I/O	External device access data I/O port
57	D6	I/O	External device access data I/O port
58	D7	I/O	External device access data I/O port
59	GND	–	Ground
60	A0	I/O	Address bus A0/ADPCM data bus 0
61	A1	I/O	Address bus A0/ADPCM data bus 1
62	A2	I/O	Address bus A0/ADPCM data bus 2
63	A3	I/O	Address bus A0/ADPCM data bus 3
64	A4	I/O	Address bus A0/ADPCM data bus 4
65	A5	I/O	Address bus A0/ADPCM data bus 5
66	A6	I/O	Address bus A0/ADPCM data bus 6
67	A7	I/O	Address bus A0/ADPCM data bus 7
68	LCD RS	I/O	H = display data, L = control data (Graphic LCD controlles KS0713)
69	USB CS	I/O	USB controller (ML60851) chip select
70	F CSX	I/O	NAND flash resd/write strobe output
71	F ALE	I/O	Address latch enable output (NAND flash & SMC)
72	F CLE	I/O	Command latch enale output (NAND flash & SMC)
73	$\overline{\text{F WP}}$	I/O	Write protect output port (NAND flash & SMC)
74	$\overline{\text{F BUSY}}$	I	Ready/$\overline{\text{Busy}}$ input port (NAND flash & SMC)
75	LCD CS	I/O	Chip select output port (Graohic LCD controller KS0713)
76	$\overline{\text{F CS0}}$	O	NAND flash 0 chip select output port
77	$\overline{\text{F CS1}}$	O	NAND flash 1 chip select output port
78	$\overline{\text{F CS2}}$	O	SMC chip select output port
79	$\overline{\text{USB RST}}$	O	Reset output (Graphic LCD controller KS0713)
80	VDD	–	Power supply input
81	VREF	–	A/D converter reference voltage input

Pin No.	Pin Name	I/O	Description
82	KY7	I	Key in (REC/STOP)
83	KY8	I	Key in (VOLUME DOWN)
84	KY9	I	Key in (VOLUME UP
85	KY10	I	Key in (PLAY MODE)
86	KY11	I	Key in (DTP)
87	KY12	I	Key in (A-B)
88	REMOCON	I	Remocon key input
89	BATT	I	Battery voltage monitoring
90	AGND	–	A/D cnverter analog ground
91	KY0	I	Key in (Skip+/Search-)
92	KY1	I	Key in (Skip-/Search-)
93	GND	–	Ground
94	KY2	I	Key in (PLAY/PAUSE/POWER ON)
95	KY3	I	Key in (STOP/POWER OFF)
96	KY4	I	Key in (MP3)
97	DEC STC	O	MP3/ADPCM bitstream clock output port
98	USB PUP	O	USB D+ pull-up control output port
99	DEC SID	O	MP3/ADPCM bitstream data output port
100	KY13	I	Key in (HOLD)

IC DESCRIPTION -4/8 (MAS3507D) - 1/2

Pin No.	Pin Name	I/O	Description
1	TE	I	Test Enable
2	$\overline{\text{POR}}$	I	"Reset, Active Low"
3	12CC	I/O	I 2 C Clock Line
4	12CD	—	I 2 C Data Line
5	VDD	—	Positive Supply for Digital Parts
6	VSS	I	Ground Supply for Digital Parts
7	DCEN	O	Enable DC/DC Converter or Voltage Supervision and is necessary for processor operation
8	$\overline{\text{EOD}}$	O	"PIO End of DMA, Active Low"
9	$\overline{\text{RTR}}$	O	"PIO Ready to Read, Active Low"
10	$\overline{\text{RTW}}$	—	"PIO Ready to Write, Active Low"
11	DCSG	O	DC Converter Transistor Ground
12	DCSO	—	DC Converter Transistor Open Drain
13	VSENS	I	Input for DC/DC converter feedback loop
14	PR	I	DMA Request or Read/Write
15	$\overline{\text{PCS}}$	I	"Chip Select, Active Low"
16	PI19	I/O	PIO Data [19] (Demand Pin in Multimedia mode)
17	PI18	I/O	"PIO Data [18], reserved (MPEG header bit 11 MPEG IDex)"
18	PI17	I/O	"PIO Data [17], reserved (MPEG header bit 12 MPEG ID)"
19	PI16	I/O	PIO Data[16] (SIC*) (alternative input for SIC)
20	PI15	I/O	PIO Data[15] (SII*) (alternative input for SII)
21	PI14	I/O	PIO Data [14] (SID*) (alternative input for SID)
22	PI13	I/O	PIO Data [13] (MPEG header bit 13 Layer ID)
23	PI12	I/O	PIO Data [12] (MPEG header bit 14 Layer ID)
24	SOD (PI11)	O	Serial Output Data
25	SOI (PI10)	O	Serial Output Frame Identification
26	SOC (PI09)	I/O	Serial Output Clock
27	PI08	I	Start-up 1) : Clock output scaler on / off
		O	Operation: MPEG CRC error
28	XVDD	—	Positive Supply of Output Buffers
29	XVSS	—	Ground of Output Buffers
30	SID (PI07)	I	Serial Input Data
31	SII (PI06)	I	Serial Input Frame Identification
32	SIC (PI05)	I	Serial Input Clock
33	PI04	I	Start-up 1) : Select CLKI frequency 14.725 / 14.592 MHz
		O	Operation: MPEG-Frame Sync
34	PI03	I	Start-up 1) : Enable Layer 3 / Disable Layer 3 ecoding
		O	Operation: MPEG header bit 20 (Sampling Frequency)
35	PI02	I	Start-up 1) : Enable Layer 2 / Disable Layer 2 decoding
		O	Operation: MPEG header bit 21 (Sampling Frequency)
36	PI01	I	Start-up 1) : SDO: Select 32 bit mode / 16 bit I 2 S mode
		O	Operation: MPEG header bit 30 (Emphasis)

IC DESCRIPTION -5/8 (MAS3507D) - 2/2

Pin No.	Pin Name	I/O	Description
37	PI00	I	Start-up 1) : Select Multimedia mode / Broad-cast mode
		O	Operation: MPEG header bit 31 (Emphasis)
38	CLKO	O	Clock Output for the DAC
39	PUP	O	"Power Up, Status of Voltage Supervision"
40	WSEN	I	Decoder Enable: Enable DSP operation
41	WRDY	O	Decoder Operation Ready
42	AVDD	—	VDD Supply for Analog Circuits
43	CLKI	I	Clock Input
44	AVSS	—	VSS Ground Supply for Analog Circuits

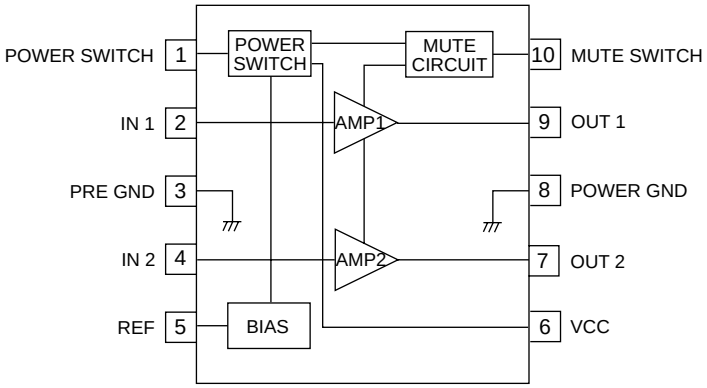
Pin No.	Pin Name	I/O	Description
1	D+	I/O	USB DATA (+)
2	D-	I/O	USB DATA (-)
3	VCC3	–	Power supply
4	TEST1	–	Test terminal1
5	TEST2	–	Test terminal 2
6	XIN	I	Crystal oscillator input for system clock
7	XOUT	O	Crystal oscillator output for system clock
8	$\overline{\text{USB-CS}}$	I	Chip select input
9	$\overline{\text{RD}}$	I	Read signal input
10	$\overline{\text{WR}}$	I	Write signal input
11	$\overline{\text{USB RESET}}$	I	Reset signal input
12	$\overline{\text{USB INTR}}$	O	Interrupt request signal input
13 ~ 16	D15 ~ D12	I/O	Upper bytes of data bus (MSB)
17	GND	–	Ground
18	VCC5	–	Power supply
19 ~ 22	D11 ~ D8	I/O	Upper bytes of data bus (MSB)
23	ALE	I	Address ratch enable signal input
24	ADSEL	I	Address input formed signal input
25 ~ 32	A7 ~ A0	I	Address input
33	DACL	I	DMA receive signal input
34	$\overline{\text{DREQ}}$	O	DMA request signal output
35 ~ 38	D7 ~ D4	I/O	Lower bytes of data bus (LSB), address input
39	GND	–	Ground
40	VCC5	–	Power supply
41 ~ 44	D3 ~ D0	I/O	Lower bytes of data bus (LSB), address input

Pin No.	Pin Name	I/O	Description
1	VSSAD	–	ADC analog ground
2	VDDAD	–	ADC analog power supply
3	VINL	I	ADC channel input (L)
4	VREF	–	ADC reference voltage
5	VINR	I	ADC channel input (R)
6	VADCN	–	ADC reference voltage N
7	VADCP	–	ADC reference voltage P
8	NC	–	Not connected
9	NC	–	Not connected
10	VDDD	–	Digital power supply
11	VSSD	–	Digital ground
12	DEC MCLK	I	System clcok: 256 fs, 384 fs and 512 fs.
13	L3 MODE	–	L3MODE input
14	L3 CLOCK	–	L3CLK input
15	L3 DAT	–	L3DATA input
16	DEC SOC	I	I2S Bit clock input
17	DEC SOI	I	I2S Word select input
18	RDC SOD	O	I2S Data output
19	DEC SOD	I	I2S Data input
20	MP5	–	ADC 1 or 2 V (RMS) input control
21	NC	–	Not connected
22	VSSDA	–	DAC analog ground
23	VDDDA	–	DAC analog power supply voltage
24	VOUTR	O	DAC output (R)
25	VDDO	–	Power voltage of operational amplifier
26	VOUTL	O	DAC output (L)
27	VSSO	–	Ground of operational amp
28	VREFO	O	DAC reference voltage

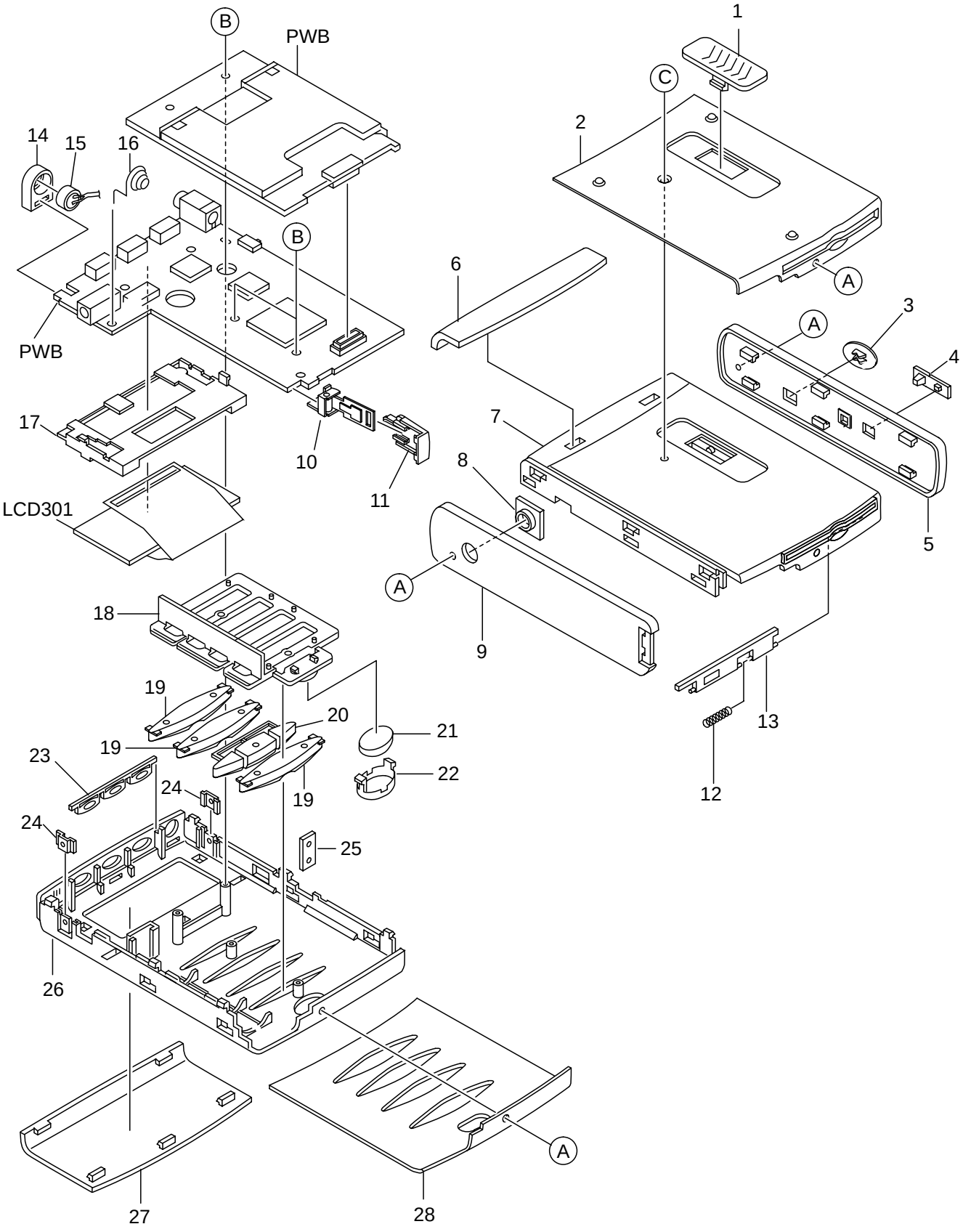
Pin No.	Pin Name	I/O	Description
1	FB	O	Dual mode feedback input. Connect to GND for +5.0 V output. Connect to OUT for +3.3 V output. Use a resistor network to set the output voltage from +2.0 V to +5.5 V.
2	LBI	I	Low-battery comparator input. Internally set to trip at +1.30 V
3	$\overline{\text{LBO}}$	O	Open-drain Low battery comparator output. Output is low when V_{LBI} is <1.3 V. $\overline{\text{LBO}}$ is high impedance during shutdown.
4	REF	–	1.3 V reference voltage. Bypass with 0.1µF capacitor.
5	SHON	I	Shutdown input. High = operating, Low = shutdown.
6	GND	–	Ground
7	LX	–	N-channel and P-channel power MOSFET drain.
8	OUT	O	Power output. OUT provides bootstrap power to the IC.

IC BLOCK DIAGRAM

IC, LA4534M



MECHANICAL EXPLODED VIEW 1/1



MECHANICAL MAIN PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S2-001-021-010		KNOB,SL EJECT(MMVX100)
2	S2-001-103-010		PLATE,REAR<Y>
2	S2-001-105-010		PLATE,REAR<YJ>
2	S2-001-104-010		PLATE,REAR YU<YU>
3	S2-001-020-010		KNOB,SL HOLD(MMVX100)
4	S2-001-112-010		COVER,USB
5	S2-001-108-010		PANEL,SIDE L
6	S2-001-107-010		PANEL,REAR
7	S2-001-002-010		CAB,REAR(MMVX100)
8	S2-001-022-010		RING JACK DC ABS
9	S2-001-109-010		PANEL,SIDE R
10	S2-001-205-010		BAT-CONTACT
11	S2-001-011-010		LID,BAT
12	8A-HZ1-222-010		SPR-C,SLOT
13	8A-HZ1-026-010		COVER,SLOT
14	S4-990-000-020		MIC BUSHING RUBBER
15	S9-320-000-010		MIC,CON/UNIT
16	S2-001-208-010		BAT-CONTACT,M;SWP
17	S2-001-201-010		HLDR LCD(MMVX100)
18	S2-001-017-010		KEY,MAIN
19	S2-001-012-010		KEY,CAP 1P
20	S2-001-013-010		KEY,CAP 3P
21	S2-001-016-010		CAP,REC
22	S2-001-111-010		RING,REC
23	S2-001-110-010		KEY,TOP
24	S2-001-202-010		PLATE NUT SIDE(MMVX100)
25	S2-001-203-010		PLATE NUT BOTTOM(MMVX100)
26	S2-001-001-010		CAB,FRONT
27	S2-001-106-010		WINDOW,LCD
28	S2-001-101-010		PLATE FRONT
A	87-067-359-010		SCREW,1.4-2.5
B	S6-397-140-400		SCREW,TAP CH 1.4-4.0
C	S6-393-141-000		SCREW,TAP 1.4-10.0

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green		

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920074 Printed in Singapore